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Communications.

Researches on the Medical Properties and Applications of Protoxide of Nitrogen, Nitrous Oxide, or Laughing Gas.

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Of Philadelphia.

[Continued from page 264.]

II. Medicinal Properties and Applications of Protoxide of Nitrogen.

As this branch of the subject—which, like the preceding, involves principles and practice of a perfectly novel yet eminently practical character is so very extensive as to require for its proper elucidation more time and space than can now be given it, I shall not attempt to enter much into detail, but merely endeavor to present a very general sketch of the prominent points of interest, reserving more specific observations for some future period. With a view, therefore, to thus exhibit a somewhat condensed and systematic summary of the medicinal relations of nitrous oxide, I will, as before mentioned, treat of it in the several aspects of its therapeutical, revivifying, antidotal, and anæsthetic influences and uses.

In a *therapeutic* as well as in an hygienic point of view, nitrous oxide is of extraordinary interest and value. Its practical applications for the removal as well as the prevention of disease are numerous and diversified. In fact, in these respects, the protoxide of nitrogen is not surpassed, if equalled by any known sanative agent outside of those included in the materia alimenta. It is indeed *sui generis*, as in consequence of its peculiar chemical constitution and properties, its specialty and potency of physiological action, its extensive range and variety of sanative application—hygienic, therapeutic, revivifying, antidotal, and anæsthetic—it differs greatly from, and is superior to the best and most powerful of known remedies. Nitrous oxide is thus unique in its physiological and sanative influences as well as in its chemical constitution and properties; for while, analogous in the extent and variety of its therapeutic uses, to some of the most active medicinal substances, such as iron, quassia, strychnia, quinia, mercury, etc., it is far superior to them in the greater range and diversity of remedial application as well as in the general character and special peculiarities of its effects upon the animal organism. Indeed, from my present knowledge upon the subject I am convinced that protoxide of nitrogen will supersede, to a considerable extent, some of our most reliable and popular remedies, while at the same time it will render the prevention and resolution of many of the ordinary forms of disease more certain, speedy and decided; and, moreover, afford the means of removing some of those peculiar abnormities now not at all or but slightly amenable to the present therapeutic measures.

In view, therefore, of its peculiar and valuable sanative properties nitrous oxide promises to be a very efficient general substitute for some of the most potent and expensive remedial agents known, such as for instance, alcohol, ammonia, quassia, strychnia, mercury, and others, variously classified as diffusable and permanent stimulants, tonics, antiperiodics, antispasmodics, alteratives, secernants, etc. Among those which it may thus more or less completely replace is that peculiar and valuable remedy *quinia*, and as a succedaneum, therefor, as well as in some measure the other medicinal agents referred to, I present it for particular consideration.

While, however, it will thus, to a great extent, become a substitute for, and better subserve the sanative purposes of a number of potent remedies, it cannot, of course, meet efficiently the necessities of the case where there is a privation of the normal components of the economy otherwise than those of its own constituents, for in the absence of some simple or compound organic substance like lime, iron, phosphorus, albumen, fibrin, etc., it could not be expected to supply the deficiency, although even here it will often prove indirectly serviceable by rousing the vital energies to that degree of activity necessary to their appropriation or development from the regular sources of nutrition, as it directly increases the strength of the body, stimulates the functions of assimilation, improves digestion, and sharpens the appetite, while at the same time furnishing within itself,

certain important elements of aliment, usually supplied in a gaseous state by the atmospheric air through the pulmonary organs; nutritive, like other matter being in the several forms of solids, liquids, and gases, principally introduced into the more complex organisms through the common channels of the stomach and lungs. Protoxide of nitrogen thus acts in the double capacity of a nutritive and remedial agent combining the properties of an article of both the materia alimentaria and materia medica, presented in a form suitable for hygienic and medicinal purposes. Hence presupposing the due proportion in quality and quantity of other essential elements of alimentation, nitrous oxide will always *cæteris paribus*, prove more or less useful within the range of its capabilities both materially and dynamically.

But passing from such general reflections to a particular consideration of the medicinal influences of this remarkable agent, I will, in order to give a more definite view of the special properties and applications of protoxide of nitrogen, present a general outline thereof so far as the current imperfect nomenclature will permit. Thus in comprehensive terms, nitrous oxide is a direct, potent, and permanent chemico-organic, arterial, nervous, cerebral, and general stimulant, secernent, depurant, aphrodisiac, and antitoxic, having a special tendency to the blood, brain, nervous system, and genito urinary organs. It exerts a powerful invigorating influence over the entire economy and is a superior nutrient, hæmatic, neurotic, tonic, disintegrant, diuretic, disinfectant, alterative resolvent, antidote, antiseptic, etc., etc. Its primary action is usually prompt and frequently well marked, though somewhat transitory in character, while its secondary or more remote effects are permanent and highly salutary, the difference between them being more in degree than in kind, for as before stated, the invigoration is continuous and persistent without subsequent depression, as is the case with most other stimulants. The properties and influences of nitrous oxide are in other words, both organic and dynamic; organic in supplying the material elements—nitrogen and oxygen—for the various chemical purposes of the economy; and, dynamic in stimulating the functions of the whole body. Thus both through its constituent elements and dynamic influences it promotes the chemico-organic and dynamic operations of the animal organism, and while thereby regulating normal, resolves as well as prevents abnormal action.

In consequence, therefore, of its peculiar chemical constitution and sanative properties, protoxide of nitrogen is especially applicable to the correction as well as prevention of numerous derangements of an atrophic and adynamic character, whether primary or secondary, antecedent or consequent. Its power of thus averting and removing disease of an asthenic nature more particularly, both general and local, organic and dynamic, primary and secondary, acute and chronic, is—according to my own experience—certainly very great and often strikingly manifested. From its marked practical value in the prophylactive and curative treatment of the more common types of disease it will, doubtless, also prove extremely useful in preventing and resolving some of those of a peculiar character now not at all or but partially amenable to the ordinary remedial influences.

In general nitrous oxide is of great utility in the treatment of those asthenic conditions in which the material and dynamical processes of the animal economy are in abeyance, and which are so frequently exhibited in the inertia of the various functions of the organism, those of the vegetal, animal, and psychical life inclusive. It is therefore especially indicated in indigestion and inefficient absorption, as also in general inactivity of the chylopoietic functions; in imperfect æration or arterialization of blood and deficient hæmatosis; in mal-assimilation and disintegration; in insufficient secretion and depuration; and, in irregular or defective motility, contractility, innervation, and cerebration. Hence in the various forms of asthenic dyspepsia and other morbid states dependent upon or associated with torpidity of the chylopoietic viscera; anæration, anæmatosis, and malnutrition generally, both primary and secondary; in depraved and defective secretion and depuration; in enervation, neuralgia, chorea, paralysis, melancholy, amentia, and adynamic states generally, the nitrous oxide will, doubtless, always prove more or less useful as a curative agent.

Protoxide of nitrogen is moreover, strongly indicated in atonic conditions of the genito-urinary apparatus, more especially in inertia and such other abnormities of the urinary and reproductive organs as are presented in cases of incontinence and suppression of urine, paralysis of bladder, spermatorrhœa, impotence, sterility, some forms of amenorrhœa, dysmenorrhœa, leucorrhœa, menorrhagia, etc., as it has a special tendency to these organs and exerts a powerful influence over their functions.

But the applications of nitrous oxide are not exclusively limited to the more purely atrophic and adynamic states, as it is available for the successful treatment of some forms of both general and local hypertrophy and mal-organization. Thus, for instance, in the undue or abnormal production of adipose, fibrous, and other tissues, as in obesity, enlargement and fatty degenera-

tion of the heart and other parts it seems to act very efficiently by superoxidation or otherwise in resolving such abnormities, and in restoring the equilibrium of nutrition, innervation, contractility and tonicity. Moreover in various analogous conditions, such as elephantiasis, phlegmasia dolens, and similar general and local hypertrophies, it will doubtless also prove useful as a remedial if not a curative agent.

Among those general morbid states to the curative treatment of which the nitrous oxide is more particularly applicable are those which precede and give rise to, or are coincident with various constitutional disorders, such as scrofula, consumption, and other affections of a like character. It is not only useful in correcting such cachexia and in averting their sequelæ, but likewise to a considerable extent, in resolving these latter. This agent, protoxide of nitrogon, will doubtless also remove as well as prevent other abnormities of an asthenic character which are more or less dependent upon a special diathesis, and besides favorably modify, if not entirely subvert the latter. But as I have already referred to some of these and a special detail will unduly extend this communication, I will merely allude in a very general way to such as are most prominent and refer those interested for a more extended notice thereof, to the published papers before mentioned, particularly to those respectively entitled anæmatosis, hæmatosis, and glucosis. Thus, for instance, in those forms of deranged nutrition and innervation attended with an abnormal production of fibrin and fat, as in polysarcia and especially in that variety known as adiposis, the nitrous oxide is of great practical value in causing these substances to undergo their ultimate metamorphosis and final disorganization, and in restoring the healthy balance of the economy. Through its chemico-organic and dynamic action protoxide of nitrogen will likewise transform and disintegrate, as well as prevent the undue production of albumen and sugar, and thus counteract their attending diseases, albuminuria and glucosuria with their sequelæ, the development of all of which I regard as dependent in the main, upon a constitutional dyscrasia, believing that a similar diathesis is generally concerned in the excessive production of such normal substances as sugar, fat, albumen, fibrin, etc., as in that of an abnormal matter like tubercle or cancer, although they might also be engendered independent of any direct constitutional predisposition.

But in the treatment of the special manifestations of such cachexia—which are numerous, diversified, and complicated—nitrous oxide is also of great practical value, for though not altogether adapted to every degree and variety of these secondary affections it is of great general utility in many if not all. Hence to derive the utmost benefit from its use in such cases it must be exhibited with due regard to the particular type, stage, intensity, and complications of the local disorder, for notwithstanding always more or less strongly indicated in these maladies to correct the constitutional derangement and subvert, remove, or at least modify its destructive sequelæ, yet it is not always admissible in every stage of the secondary lesion, especially when of an actively irritable or inflammatory nature and of a sthenic character, but in the subacute and chronic condition, particularly of an asthenic type, it is mostly of superior value.

Thus, for instance, in phthisis in which it is very useful in promoting healthy arterialization, hæmatosis, assimilation, secretion, and innervation, and in relieving oppression of breathing, cough, and other distressing symptoms, it must be exhibited with due regard to the local complication, for if given too freely during active inflammation or tuberculous colliquation, it may promote the destructive process and hasten the fatal termination, whereas if employed in proper quantities with just discrimination, it will tend in all stages, to diminish morbid action, remove abnormal matter, rectify constitutional derangement, and restore the normal organic and dynamic status of the economy.

Again in another class of secondary affections connected with the abnormal deposit or undue production of such normal substances as sugar, fat, albumen, etc., in which it is very efficient, nitrous oxide must be employed with the same restrictions in order to derive the utmost benefit. This is particularly the case in those disorders engendered by a more immediate eliminative effort on the part of certain organs like the kidneys, to remove from the body an excess of such matters, and which are manifested in the various forms of glucosuria, albuminuria, renal irritation, congestion, inflammation, degeneration, and disorganization with their destructive concomitants. In these cases in suitable quantities, properly exhibited, nitrous oxide will doubtless always prove more or less useful not only by directly transforming, disintegrating, and preventing the further excessive development of such offending substances, rectifying the constitutional cachexia, restoring the healthy balance of innervation, nutrition, secretion, and elimination, but also by resolving more or less completely the consequent local lesion.

As a curative agent in glucosuria of a mild form nitrous oxide is especially active, for I have repeatedly seen the saccharine condition of the

urine rapidly disappear under its use, but of its remedial efficiency in the extreme cases of this affection, I am unable to speak from practical experience, never having had an opportunity of treating such an abnormity. Nevertheless for the cure as well as prevention of all forms of that peculiar malady known as diabetes—except perhaps, the traumatic variety so long as it is thus directly dependent upon the state of traumatism—I am confident protoxide of nitrogen will, *cæteris paribus*, prove a specific. Moreover I firmly believe this agent will also materially modify if not entirely remove the various tuberculous, cataractous, and other sequelæ of the glucosic cachexia. Hence with the exception mentioned, in every grade and variety of the glycogenic disorder, even if attended with extreme modification of structure, nitrous oxide promises to prove of great remedial value. For the curative treatment, therefore, of the glycogenic diathesis and the various derangements of the body connected therewith, both functional and organic, and especially those forms known as glucosuria, diabetic cataract, and other concomitant local lesions, protoxide of nitrogen is particularly recommended as a very promising remedy. It may probably also exert a beneficial influence to some extent, at least, in modifying or resolving other varieties of cataract, and analogous alterations of structure in different parts of the economy.

In the numerous sequelæ of such diatheses as scrofulosis, adiposis, albuminosis, and others of a like character so frequently presented in the forms of depraved nutrition, defective or degenerate structure, modified secretion, and the various inflammatory complications of the different tissues and organs, nitrous oxide is also generally applicable with the same restrictions as to the special contraindicating circumstances before mentioned. Hence, *cæteris paribus*, in scrofula, fatty, waxy, and similar modifications of tissue, albuminuria, chyluria, oxaluria, etc., with or without dropsy, it may be exhibited somewhat freely, but in the more acute and advanced states of sthenic irritation or inflammation it should be carefully employed, if at all, in very small quantities, for though always more or less strongly indicated to correct the constitutional dyscrasia, promote normal metamorphosis, resolve local lesions, restore and regulate the healthy action of both the general system and particular part affected, yet if given unduly or inappropriately it will be apt to increase the inflammatory action and the tendency to disorganization of the implicated structure. The use of protoxide of nitrogen is therefore mostly contraindicated in all such actively irritable or inflammatory states, even of an asthenic nature, and especially of the cerebral, cardiac, hepatic, or renal organs. This is particularly the case in the several nephritic complications of the character referred to, and among others the so-called Bright's disease in which nitrous oxide may frequently be employed with benefit, if given in small quantities at a time and with such other precautions as not to increase uræmia or unduly stimulate the affected organ and general system.

The same principles apply with even greater force in another species of secondary disorder of which rheumatism and gout are examples. In such abnormities nitrous oxide is also highly useful in correcting both the constitutional and local derangement when of a chronic character, but is as a rule, inadmissible in the acute form in consequence of the active tendency to cardiac inflammation, and for the same reason more or less objectionable in the subacute condition, though to a certain extent beneficial therein, when exhibited in moderation and with due discrimination. In the first variety, however, notwithstanding it occasionally seems to temporarily develop or augment pain and excitement from a disproportionate quantity, perhaps, yet by modifying the general dyscrasia, removing the immediate cause of disturbance, and restoring the healthy equilibrium of system it sometimes speedily resolves the abnormity altogether.

It will thus be seen that protoxide of nitrogen has a very wide range of therapeutical application in that class of maladies connected with the undue or irregular production of such substances indicated, especially when of an amyloid, glucoid, ceroid, adipoid, albuminoid, or pigmentary character. Hence in the various concomitant lesions of nutrition manifested in the different modifications and degenerations of structure from abnormal formative or disintegrative metamorphosis, whether of a benign or specific nature, and particularly in the many analogous abnormities of the kind in the tissues of the hepatic, cardiac, opthalmic, renal and other organs and parts of the body, nitrous oxide will, no doubt, prove as generally useful as it has heretofore specially.

As already intimated in those other diathetic derangements of nutrition and secretion attended with the extraneous development of such substances as oxalic acid and its analogues, nitrous oxide will doubtless also prove practically useful in correcting the abnormal and in restoring the normal action of the molecular and somatic life as well as the special functions and organs more immediately implicated. From its superior power in modifying general nutritive, dynamic, and secretory action I believe protoxide of nitrogen will thus prove of great value in preventing and, perhaps, also in

causing the destructive disintegration as well as expulsion of certain adventitious concretions in different parts of the body, and particularly some of the varieties of biliary and urinary calculi. The special type or variety of lithiasis to the treatment of which it seems most applicable is that resulting from an organic deficiency of its constituent elements, oxygen and nitrogen, although it is not improbable that it may likewise be efficient in preventing the development of other forms of calculi in which these elements are not so immediately concerned through its general chemico-organic and dynamic influence in modifying morbid constitutional and local tendencies, and in promoting healthy metamorphosis, innervation, depuration, and elimination. Hence, as an antilithic it may be resorted to in the confident hope that it will often meet to some extent, at least, both the general and special indications and be thus directly and indirectly useful.

That protoxide of nitrogen will act very promptly and efficiently in promoting hæmatosis and the general assimilative, disintegrative, and excretory processes particularly those more immediately connected with the renal organs, I am well satisfied from much observation and experience. Indeed in these respects it is not surpassed if equalled by any other known agent, and especially in the character of its effects upon the kidneys as it not only actively promotes the secretion of urine, but also greatly influences its normality both in quantity and quality. Nitrous oxide is thus, in fact, a most potent and peculiar diuretic, for unlike other remedies of this class, while it directly increases the solid components of the urine and particularly urea, it at the same time regulates and facilitates the elimination of the renal secretion, arterializes and purifies the blood, gives tone to the tissues, strengthens the nervous, and invigorates the whole system. It is hence applicable to the preventive and curative treatment of quite a number of urinary affections, such for instance, as anuria, anazoturia, chyluria, lithuria, dysuria, hydruria, hæmaturia, enuresis, cystorrhœa, paralysis of bladder, and others of a similar character.

Besides those thus indicated there are various other abnormities apparently unconnected with any special diathesis, constantly presented in the different forms of asthenic hyperæmia, congestions, inflammations, serous, hæmorrhagic and plasmatic effusions, and depraved, diminished, or excessive secretion within or from the several parts of the body, particularly of the pulmonary, alimentary, and genito-urinary organs, in which nitrous oxide is also generally useful. Hence in the several maladies of the kind, and especially in such conditions as diffused anasarca and localized dropsy, catarrhus, diaphoresis, diuresis, leucorrhœa, diarrhœa, cholera, and similar internal and external defluxions it may frequently be employed with decided advantage.

This agent, protoxide of nitrogen, is also useful for the removal of those constitutional disorders upon which such affections are so frequently dependent, as for instance, anæmia, hydræmia, chlorosis, and other forms of mal-nutrition and debility.

While, however, the therapeutical applications of nitrous oxide are so varied and important in this direction they are not thus exclusively limited to the more purely vegetal or organic, as it is also of extensive use in the animal and psychical life, being exceedingly valuable in adynamia of the brain and nervous system. Thus in the numerous asthenic derangements of innervation and cerebration manifested in the different forms and degrees of enervation, anæsthesia, neuralgia, imbecility, mental depression, hypochondria, delirium, and similar mental states, it is generally applicable. By regulating vital action and intensifying all the functions of life protoxide of nitrogen often proves very efficient as an anodyne, hypnotic, and general nervine in correcting undue excitability of body and mind, relieving pain and suffering, promoting sleep, removing vital inertia and atony, and in restoring the healthy balance of the economy.

In addition to these aberrations of general innervation and intellection there are others connected with special sensation, contractility, and motion, in which nitrous oxide is also more or less strongly indicated. It is hence applicable in spasm, torpidity, debility, and paralysis, whether local or general, partial, or complete, acute or chronic, as in chorea, epilepsy, amaurosis, hemiplegia, paraplegia, and analogous convulsive and atonic disorders. As an antispasmodic, antiparalytic, and corroborant, it is thus of general application in the treatment of all such affections dependent upon an adynamic state either of molecular or somatic life and not on defective nutrition from the absence of some organic element, especially of the neural matter, as phosphorus, fat, albumen, osmazome, etc., for it is obvious that in all cases of starvation of brain, nerve, muscular or other tissue, neither protoxide of nitrogen nor any other agent can be of more than incidental service unless they supply the very elements of structure required. Hence in order to derive benefit from this or any other remedy it is necessary to previously insure healthy alimentation by introducing into the economy the requisite elements of nutrition in such quantities and form best adapted to supply the special organic

deficiencies, and secondarily, to resort to such extraneous measures as may be essential to promote assimilation and normal life action.

These very general remarks will serve to show that protoxide of nitrogen has an extensive range of therapeutic as well as hygienic application, and especially in subacute and chronic conditions of an asthenic nature. While, however, it is usually most applicable in such morbid states, yet it is not thus exclusively limited, as it is also serviceable in the treatment of many other disorders of an adynamic character in their more active or acute as well as in their secondary or atonic stage. But as the notice of this class of maladies involves to some extent, the consideration of the revivifying and antidotal properties and applications of nitrous oxide, I will proceed to point out its merits in this direction.

DEFECTIVE AND IMPAIRED VISION,

By Laurence Turnbull, M. D.,
Ophthalmic Surgeon to Howard Hospital, &c.

(Continued from p. 277.)

The Accommodation of the Eye.

The human eye is one of the most beautiful as well as one of the most useful organs which man possesses; with it he can see the smallest insect or the loftiest mountain; at one moment the circulation in the frog's foot, or at a glance take in a vast expanse of scenery. Is there no change in the eye in viewing these different objects? Yes, there is. The term we use to express the power which the normal human eye possesses of adjusting itself imperceptibly and unconsciously to different distances is "accommodation."

Various opinions have been expressed and numerous experiments have been made to determine in what the changes of accommodation of the eye consist. The cornea, from its great importance in accurate vision was supposed to have undergone some alteration during accommodation, but Helmholtz experiment put this theory to rest by his ophthalmometer in showing that there is no alteration in the curvature of the cornea during accommodation.

Arlt supposed that the muscles of the eyeball played an important part in bringing about the proper adjustment of the eye in conjunction with the ciliary muscle. He states that "The accommodation or adjustment of the eye for near objects is brought about by the elongation of the eyeball in the optic axis, by the pushing back of the posterior wall of the eyeball, by the retrogression of the yellow spot and its vicinity. The organs causing this are on the one hand, the straight and oblique muscles of the eye; on the other, the ciliary muscle—they being simultaneously placed in a higher state of tension."*

It has been proven by a case of Von Graefe's that the action of the external muscles of the eyeball is not necessary in the act of accommodation for near objects, for in his case all the recti and obliqui muscles of the eyes were paralysed, so that the eyes were completely immovable, and yet the power of accommodation was perfect.

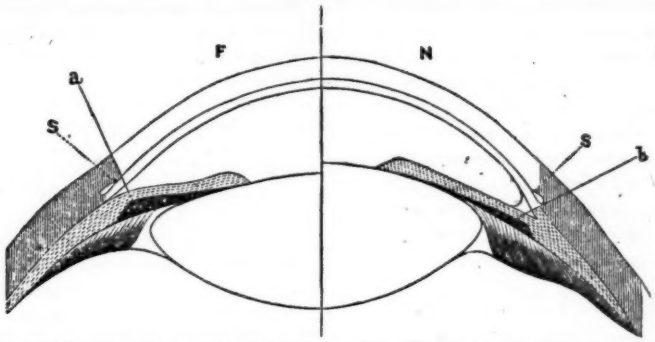
"It has at length, however, been definitely settled chiefly by the experiments of Cramer and Helmholtz (conducted independently of each other), that the necessary change in the refraction of the eye during accommodation is due to an alteration in the form of the crystalline lens. Helmholtz found by means of his ophthalmometer, that the lens did not change its position during accommodation for near objects, but this was brought about by a change in the curvature of the anterior and posterior surfaces of the lens, which become more convex (the lens itself thicker from before backwards), so that the lens acquires a higher power of refraction, and consequently a less focal distance, by which means rays from even very near objects are brought to a focus upon the retina. He found, with the ophthalmometer, that the eye undergoes the following changes during accommodation for near objects: 1. The pupil diminishes in size. 2. The pupillary edge of the iris moves forward. 3. The peripheral portion of iris moves backwards. 4. The anterior surface of the lens becomes more convex (arched), and its vertex moves forward. 5. The posterior surface of the lens also becomes slightly more arched, but does not perceptibly change its position. The lens therefore becomes thicker in the centre."†

As the volume of the lens must remain the same, he thinks that we may moreover, assume that the transverse diameter of the lens becomes diminished. He finds, from calculation, that these changes in the lens are quite sufficient for all accommodative purposes.

Fig. 7 Illustrates the changes which the eye undergoes during accommodation. The anterior portion of the eye is divided into two equal parts. The one half F, shows the position of the parts when the eye is adjusted for distance; the other, N, when it is accommodated for near objects. When the eye is in a state of rest the iris forms a curve (a); in the vicinity of Schlemm's canal (s); when accommodated for near objects the fibres of the iris become contracted, the periphery of the iris straightened (b); and the anterior chamber lengthened, thus making up for its loss in depth, through the advance of the anterior surface of

* Arlt Vol. III., p. 207.
† Helmholtz—Wells.

Fig. 7.



the lens. The question was set at rest by a case which occurred in Prof. Von Graefe's clinique, in 1859. The case is shortly this: Whilst Prof. Von Graefe was abscising a prolapse of the iris, the patient made a sudden violent movement with his head which the assistant could not check; the iris was somewhat dragged, and a dialysis occurred at the opposite side. The portion of iris still lying between the lips of the wound was drawn gradually out until the dialysis was complete. The whole iris was thus removed. The slight effusion of blood soon disappeared from the anterior chamber. Ten days after the operation the cornea had also regained its transparency. The state of vision in this eye was as perfect as the other normal eye. He could count fingers at one hundred and fifty feet, and read No. 1 of Jägers, *i. e.* the smallest print, at eight inches. The power of accommodation was most accurately and severely tested, and it was found in spite of the total absence of the iris, his power of accommodation was quite normal.

The Range of Accommodation.

We can test the range of accommodation by means of Von Graefe's wire optometor which consists of a small square steel frame, across which a number of very fine parallel, vertical wires are stretched. This frame is attached to a brass rod upon which it is movable, the rod being graduated in inches and feet. One end of the rod is placed against the forehead of the person to be examined, and then the frame is moved to the nearest point at which the individual wires still look clearly and sharply defined; the distance of this point from the eye is read off from the graduated scale, and put down at the *near point*. The frame is then removed to the greatest distance at which the individual wires still appear sharply defined, and this is noted as the *far point;* the distance between the latter and the near point is the territory or *range of accommodation*. This instrument requires some exactitude and intelligence on the part of the patient.

Mr. Wells finds it generally more practical (particularly with hospital patients) to try them with the test types. If, whilst they are reading No. 1, we move the type a few times alternately nearer and further from the eye, we can readily ascertain with exactitude the nearest and furthest point of distinct vision.

Donders classifies eyes according to the furthest point of distinct vision, and distinguishes three categories.

1. *Normal or emmetropic* eyes, in which, when the eye is at rest, parallel rays are brought to a focus on the retina. When the normal eye is in a state of rest, the focal point of its dioptric system is situated on the bacillar layer of the retina.

2. *Myopicor brachymetropic* eyes, which are adjusted, when in a state of rest for divergent rays. In this case parallel rays are, even when the eye accommodates itself for its furthest point, brought to a focus before the retina; so that distinct images are formed on the retina only of those objects, the rays from which impinge divergently upon the eye. In the myopic eye when in a state of rest, the focal point of the dioptric system lies before the retina.

3. *Hypermetropic* eyes are adjusted for convergent rays. In this case parallel rays are brought to a focus behind the retina when the eye is at rest; for in hypermetropic eyes the focal point of the dioptric system lies, when the eye is in a state of rest, behind the bacillar layer of the retina.

When the distance at which an ordinary sized type can be read comfortably, is much less than *twelve inches*, the vision is said to be myopic, when on the contrary, it is much greater, vision is said to be presbyopic. *Twenty feet* is the distance arbitrarily assumed as that which the rays of light from an object are about parallel. The limits within which the eye can see perfectly distinctly at different distances, in other words the limits of perfect vision may be put down at below *nine* and

fifteen inches, below *nine* or above *fifteen* inches vision may be still distinct, but not perfect.

The surgeon should have a series of concave glasses with which to test the sight when complaint is made that objects at some distance cannot be seen distinctly, as in myopia or shortsightedness; and a series of convex glasses for the same purposes, when the complaint is that in reading or sewing, the sight is indistinct, unless the book or seam be held at arm's length, as in presbyopia or farsightedness.

Hospital Reports.

Jefferson Medical College,
April 20, 1864.

Surgical Clinic of Prof. S. D. Gross, M. D.

Reported by *Dr. Wm. H. Bartles.*

Foreign Body in the Ear.

The difficulty of extracting a foreign substance from the ear is often as great as the annoyance and pain it occasions the patient. The irritation it sets up in the delicate lining of the auditory tube, usually necessitates its immediate removal.

In this case, A. B., aged 10 years, has a cherry-stone in her right ear, introduced seven years ago. A grain of corn, a bean, or any similar substance, might very readily expand under the influence of moisture and heat; and exerting great pressure upon the tissues, give rise to intense pain. It is wonderful that in this case there has been no inflammation nor discharge.

When the offending body was removed by Dr. Gross, it was found to be covered by black, thick wax. The instrument which he employed is one of his own invention, and is described and delineated in the 2d Volume of his System of Surgery. It is as simple as it is effectual.

Case of Ptosis.

Ptosis is a term which denotes an inability to open the eyelid, from some defect in the elevator muscle. It seldom exists on both sides at the same time.

In the case of this child, E. B., aged 11 months, it is a congenital affection of the right eye. She was unable to open her eye for several days after she was born, and in this way the defect was first noticed. It may arise from mere atony of the elevator muscle, from paralysis or hypertrophy, or from some disease or injury of the brain.

What shall be done in this instance? The child is strong, and we will remove an eliptical portion of the redundant tissue, including a part of the orbicular muscle. This was effected, and the parts were brought together by three delicate interrupted sutures, which promptly arrested the bleeding.

The sutures must be removed in three days, and in the mean time cold water must be used as a dressing. It is impossible to predict the result, but this is the only way to get rid of superabundant integument. If the affection arises from other causes, the treatment must be governed accordingly. When the brain is implicated, nothing can be done.

In operating upon infants, they should be wrapped in a folded sheet or towel, securely pinned. The head being then placed between his knees, the operator has perfect control over the child.

This patient was brought back several weeks after the operation, immensely improved.

Carcinoma of the Lip.

This disease attacks almost exclusively the lower lip, and usually begins in a small bluish tubercle in a warty excrescence, or in a fissure. It is peculiarly a disease of advanced years. The present instance is an exception to the general rule, and is on this account particularly interesting.

J. F., an Irishman, aged 33 years, has a small tumor on his lower lip, which is beginning to ulcerate and cause him much trouble. It first appeared six years ago, but after suffering from it for a few months it was removed, and has only reappeared within the last year. Since then its growth has been rapid, puckering and tightening the parts.

The disease is essentially scirrhus, modified by the structure of the tissues. All the organs have their peculiar formation and habits, which exercise a controlling influence. In the lip there must necessarily be epithelial scales, and other material not found in scirrhus of the breast or liver. This exercises a modifying influence, so that the malady is not so fatal as true cancer. It is commonly known as epithelioma, cancroid, or epithelial cancer; is tardy in its growth, and usually assumes the encephaloid form when it reappears after removal, increasing rapidly; then nothing can arrest its progress, as it involves the cuticle, skin, lip, gums, jaw, teeth, and even the ganglions of the neck.

Professor Gross removed a large V shaped piece from the lip, and placed the raw edges in exact apposition, as in the operation for hare-lip. Three pins were introduced, embracing two-thirds of the thickness of the lip, including the arteries, and stopping the hæmorrhage. The ligatures were wrapped around the pins in an ellipse, not in a figure of 8, as is usually done, and were carried from one to the other, thus intimately approximating the parts. The tissue in this part of the body is very elastic, but there will necessarily be great tension, from the large size of the piece excised, though even then there is generally union by the first intention.

The two lower pins should be removed at the end of the third day, and the upper one twenty-four hours afterward. The diet should be nourishing, and the general health properly attended to; for the better this is, the less likely will the disease be to return.

Inverted Toenail.

F. E., aged 18, has an inverted toenail; she does not know how long it has existed; she cannot wear a shoe. This affection is intensely painful, and is the result, generally, of wearing tight boots, though it sometimes seems to be congenital, and it also occasionally occurs in several members of the same family.

The toe and parts around are large, bulbous, and inflamed; and we can readily imagine the difficulties they would offer to progression. The edges of the nail are tucked in, and pressing upon the soft parts beneath, give rise to pain and irritation, such as few persons are capable of bearing.

The operation, in this case, consisted in removing the offending portion on each side of the nail, "root and branch," leaving the large central portion for the protection of the toe.

The bleeding was quite considerable, but beneficial, relieving the congestion and inflammation. The limb must be placed in an elevated position, while the parts are painted two or three times a day with a solution of iodine, and then buried in a flax-seed cataplasm until the granulating process is fairly established, when simple dressing will suffice.

Case of Soft Chancre.

Professor GROSS does not subscribe to the doctrine of M. RICORD and others, that the hard chancre alone is the infecting ulcer contaminating the system, and that the soft variety is purely a local affection. In his experience, some of the worst cases of secondary and tertiary syphilis have been caused by the infecting properties of the latter.

J. D., colored, has a soft chancre, situated on the free margin of the prepuce, its most usual site. It has existed for two months, is extremely ragged in appearance and phagedenic in its action, and has a base entirely free from induration. He has only lately noticed a slight enlargement of one of the lymphatic ganglions of his groin.

The diagnosis seems to be verified by the fact that there have been several sores during the progress of the disease, showing that the matter is highly inoculable.

The treatment must be mild and gentle. In the first place, as the tongue is coated, and the bowels constipated, with loss of appetite, and headache, the man may take five grains each of blue mass, colocynth, and jalep, followed by the antimonial and saline mixture. The organ should be immersed several times a day in a tin cup of tepid water containing a small teaspoonful of table salt, which is slightly stimulating, as well as detergene. Cleanliness is a great desideratum in this class of diseases. In the mean while, the parts should be constantly covered with lint saturated with lead water and laudanum, or spread with dilute ointment of the acid nitrate of mercury. The penis must be placed in an elevated position, and there must be perfect quietude of mind and body.

Senile Gangrene.

Chronic mortification of the "toes and feet" usually attacks old persons of worn out and debilitated frames. It may occur at earlier periods of life. Ossification of the arteries is the predisposing cause of the disease, but it more immediately arises from the formation of fibrinous clots closing up the caliber of the arteries, and thus mechanically intercepting the passage of the blood.

M. N. L., 58 years old, a man of temperate habits, supposed that the great toe of his left foot was frostbitten. He was exposed to the intense cold of last winter.

Professor GROSS called the attention of the class to the fact that the man was prematurely old; that the foot and leg were œdematous, the parts pitting under pressure; and that the radial artery was hard and firm from fibroid degeneration. These symptoms, coupled with the circumstance that the man's system was worn out and depressed, indicated senile gangrene.

He disliked very much to interfere in such cases, but in the present instance, since there was necrosis of the bone, he would remove it at its metatarso-phalangeal articulation, so that the parts might heal by the granulating process. The limb must be placed in an elevated position, while the affected parts are painted twice daily with dilute tincture of iodine, and enveloped in a lead poultice. An attempt must be made to raise the powers of life, by tonics, generous diet, and stimulants.

Collodium for the Stings of Wasps.

Dr. MUNDE in the *Lancet*, states that a coating of collodium applied to the part injured causes the pain to disappear and the swelling to rapidly subside.

EDITORIAL DEPARTMENT.

Reviews and Book Notices.

Outlines of the Chief Camp Diseases of the United States Armies, as observed during the present war—a practical contribution to military medicine. By JOSEPH JANVIER WOODWARD, M.D., Assistant Surgeon U. S. A., member of the Academy of Natural Sciences of Philadelphia, &c., &c. Philadelphia: J. B. LIPPINCOTT & Co., 1863. 8vo. Price —

[Continued from page 283.]

We have already expressed our regret at the substitution, by Dr. WOODWARD, of the term malarial for that of miasmatic, as it is generally understood among us. This regret extends to the new name which he has given to this mixed disease, now to be considered. If the word miasmatic, in this connection, must be abandoned, we cannot but think a more euphonious title than that which is given would have been *malarial-typhoid fever*. Thus, according to our author's classification, we have *typhoid fever*, *malarial remittent fever*, and we should then have *malarial typhoid fever*. It cannot be objected that this would not express the scorbutic complication, for the very word *typhoid* designates this resemblance to typhus, the condition of blood poison, which corresponds to that referred to.

Under the title of *miasmatic-typhoid fever*, the readers of this journal will remember we published, in the form of a clinical lecture, given June 7, 1862,* by Dr. JAMES J. LEVICK, of the Pennsylvania Hospital, the report of a number of cases of this combined form of disease, which even at that early period of our war had shown itself among the soldiers and sailors of our national service. The description there given corresponds with that subsequently given by Dr. WOODWARD, of one group of typho-malarial fever—that without the scorbutic complication.

Passing by the comparatively unimportant matter of nomenclature, we come next to consider the very important subject matter of this chapter. We cannot but regard this as one of the most, if not the most, valuable of the contributions to our professional knowledge which Dr. WOODWARD has made. His merit does not so much consist in directing attention to the fact, that these poisons may co-exist in the same individual, for this was long since known, and especially to the physicians in our Southern States; but it is to be found in the careful manner in which the description is given of the disease as thus modified, and the treatment demanded as one or the other set of symptoms predominates. We were about to transfer to these pages his description of this modified form of fever, but on further consideration of the subject, have thought it best to refer our readers, as we now do, to the work itself. We believe that the morbid phenomena there delineated show themselves not only in military, but in civil practice; and feel that we cannot do better than commend to the careful consideration of our readers every paragraph of the one hundred pages which follow.

We do not propose to follow out in detail the consideration of the treatment thus proposed; one or two matters we regard of such importance that we are unwilling to pass them by unnoticed. One of these is in connection with the administration of alcohol. Invaluable as we know this to be in the

* See Vol. 8—N. S. No. 12. Page 283.

treatment of typhoid fever, simple or complicated, we fully believe with Dr. Woodward, that "this potent agency is readily misused, and that it is daily abused, especially by young and inexperienced practitioners." On page 137, Dr. W. recommends, when the bowels are constipated, that some mild saline cathartic should be given. We confess to a preference for a teaspoonful of castor oil, under these circumstances. We doubt very much, though we know such is the doctrine now taught abroad, if the diarrhœa of typhoid fever be merely an eliminative process, and one not to be interfered with. We can recall no case in which the disease was aggravated by checking this, to effect which, *en passant*, we may say we know no agency so prompt and so potent as an enema of laudanum. We commend to young practitioners the judicious advice respecting the treatment of the disorders of the brain and nervous system in this fever, and fully agree with our author that a pill of acetate of morphia with extract of hyoscyamus is greatly preferable to the Dover's powder, from which, like Dr. W., we have often seen most distressing nausea result.

We differ, however, entirely from Dr. Woodward in his estimate of the oil of turpentine in the treatment of certain stages of typhoid fever. Indeed, we know of no remedy which has so uniformly met our expectations as this has done. Many cases of typhoid fever run their whole course without ever requiring the exhibition of this drug; indeed, we can conceive of cases in which it might even be objectionable, but in the peculiar stage of the fever, so accurately portrayed by Dr. Wood, (See Practice of Medicine, p. 346, 4th Ed.), we have found it invaluable. Nor can we, in looking back on a somewhat protracted public practice, recall a single case in which it increased the diarrhœa or permanently disordered the stomach, the objections which Dr. Woodward urges against its use.

Simple intermittent and remittent fevers (malarial), as was to be expected, prevailed to a large extent in the army. Nothing especially interesting or novel occurs here, if we except the use of quinine in whisky as a prophylactic. "Half a gill of whisky, in which quinia is dissolved in the proportion of two to four grains to the gill, is served out twice daily to every man in the command." Unfortunately, experience has shown that quinine whisky administered as above "is far from being a powerful or complete prophylactic measure." There are certain circumstances, however, in which a whisky ration, either with or without quinine, is exceedingly desirable, and exercises the most beneficial influence. These are thus specified by our author: "When the troops are exposed to fatiguing duties, such as heavy marches and labors in trenches, or in the construction of fortifications, especially if from difficulty of transportation or other causes the rations are deficient either in quantity or quality, a daily issue of whisky in moderate quantities exercises the most beneficial influence. If, in addition to the above circumstances, the troops are operating in a malarial region, and general symptoms of malarial poisoning begin to manifest themselves, such as the development among the men of anemic symptoms, with an icteroid hue of countenance, with the frequent occurrence of intermittents, the use of quinia in conjunction with the whisky may be advantageously resorted to." Surgeon J. H. Brinton, U. S. V., has informed the author that in the Spring of 1862 he caused the distribution of five hundred barrels of whisky among the troops of General Grant's army, under the peculiar circumstances referred to, "with the greatest advantage." He, however, gave the whisky by itself to those men only who continued on duty, and quinine to those cases only in which the presence of evident malarial phenomena appeared to demand its use.

Congestive or pernicious intermittent fever has prevailed more or less in the army, as it always has in those parts of our country in which the troops have been quartered. Dr. Woodward describes an interesting variety of the affection observed by him during the seige of Yorktown, which was regarded by many surgeons as "spotted fever." These cases were regarded by the author as simply pernicious remittent, the petechial eruption which existed being due to the depravation of the blood produced by the disease operating upon men with constitutions already modified by the prolonged camp diet. The cases treated by the author all terminated successfully, under the action of large doses of quinia.

A highly interesting chapter follows, on Chronic Malarial Poisoning, to which we can do no more than commend the careful attention of our readers. In fact, our limited space forbids us to do much more than this with the remaining subjects treated of by our author. *Jaundice* is noticed as occurring in an epidemic form in the army, "a frequent and troublesome, though not a fatal disorder." We have always believed that in many of these cases of jaundice the starting point of the trouble was to be found in inflammation of the duodenum, and an extension of irritation from this structure to the liver. In other cases, the jaundice, doubtless, was of the ordinary character, and due to the causes enumerated by Dr. Woodward. Some pages are devoted to an exposition of the physiology of the hepatic secretion, in which suitable mention is made of the interesting paper of Dr. Austin Flint, Jr., on this subject, in its connection with the pathology of jaundice. Nearly sixty pages are occupied in the consideration of disorders of the bowels, as manifested in simple diarrhœa, chronic diarrhœa, and dysentery. We very much regret that we cannot give to these interesting subjects, portraying as they do diseases of the most important and intractable character, the attention they deserve. As before stated, we must content ourselves with commending this part of the work to the careful consideration of our readers. An interesting fact is mentioned in reference to the post-mortem appearances in fatal cases of chronic diarrhœa, namely, that the patches of Peyer were very often not ulcerated, but were "the seat of pigment deposits, giving them a shaven-beard appearance."

Before parting from this subject we may here remark, that we have heard complaints made by medical men of our army, of the failure on the part of the author to acknowledge in this volume their individual contributions made to the Surgeon-General's office to the history of this and other diseases. While there is no doubt that many of the facts announced by Dr. Woodward were the results of his own personal observations and experience, yet these must have been confirmed, and others derived from the carefully prepared observations and records of some of our most accurate pathologists, which we know were forwarded to him. It may be that to have acknowledged all these would have increased this volume to an inconvenient size, but justice demands that in the "Medical History of the War," a volume to which Dr. Woodward frequently refers as soon to be published, such a full acknowledgment should be made, as we presume Dr. Woodward intends shall be done.

Camp *measles* has prevailed to a most remarkable extent, 21,676 cases and 551 deaths having been reported during the first year of the war—a large number of cases of this disease having not been reported, which prevailed prior to their being mustered into the service of the United States, while yet in their camps of instruction. This is an extremely interesting subject for further investigation; and though Dr. Woodward's argument in refutation of

the straw fungus origin of measles appears to be almost conclusive, we yet think the whole subject one worthy of further examination. The occurrence of this disease to such an extent in the army, is the more remarkable from the fact that although measles has occasionally prevailed, as it always does in the community, there had been no decided epidemic prevailing in civil life during the two years corresponding with that of which these statistics are given.

In the matter of diagnosis, besides the diseases enumerated by Dr. W., as liable, from the eruption, to be confounded with measles, especially of the adynamic form, we must add that of typhus fever, with its true rubeoloid rash. Nothing could be more judicious than the course of treatment recommended by our author as suited to this disease.

Over 125,000 cases of *catarrh* are reported as having occurred among our troops during the first year of the war—"presenting, generally, an adynamic character, and large numbers of cases occurring simultaneously, it comes thus to resemble influenza more closely than ordinary catarrh"—and was, doubtless, in many instances, the true catarrhal fever which as an epidemic prevailed to such an extent over our whole country during the years 1861 and 1862. We could wish that all physicians held the same views respecting the treatment suited to this disorder as the writer of the book before us; and instead of crowding upon an enfeebled stomach nauseating and depressing remedies, would bear in mind that in very many instances the affection of the air passages is but an incident in a far more important constitutional disorder, which requires rather the exhibition of opium, quinine and brandy, and which is best treated locally "by sinapisms and rubefacient liniments," instead of by leeches, or even by cups. We are sure that in very many instances, even in cases of pulmonary phthisis, nauseating expectorants are very unnecessarily prescribed and persistently used among us. So, too, with pneumonia as we now generally see it, not with certain sporadic cases occurring to vigorous individuals, but with epidemic or typhoid pneumonia; there can be no doubt that far more will be accomplished satisfactorily, as our author intimates, by ammonia, quinine and brandy, than by the lancet, tartar emetic, and the antiphlogistic plan. Our own opinion of veratrum viride in the treatment of this disease, or indeed of any other, is best expressed in the language of a recent British writer, as given below: "While we have such a sedative as aconite to rely on, it will be strange if even for a time practitioners should be so unwise as to neglect it for veratrum viride, a drug so potent in inflicting pain, and so inert till extreme nausea is induced."—Dr. James Watson, Ed. Med. Journal, Jan., 1864.

Pseudo Rheumatic Affections is the title of the last chapter of this interesting volume. Extensive observation of a vast number of cases reported to the Surgeon-General's office as acute rheumatism, chronic rheumatism and lumbago, has satisfied our author that a very great number, and probably the larger number, are not rheumatism, nor in any way allied to that affection, except by the presence of a single symptom—pain. There can be no doubt, as Dr. Woodward states, that the cases now under consideration are to be interpreted simply as examples of incipient scurvy, and will be found to disappear under the use of a liberal antiscorbutic diet. We have already, in the early part of this notice, referred to the occurrence of such cases in civil practice, after a protracted and severe winter. In such instances it is that fresh lemons and the exhibition of cod liver oil are especially useful.

Malingering is next referred to, and the opinion expressed that this has been exceedingly common during the first two years of the war. Our field of observation has been entirely too limited for us to express an opinion on this subject; and yet we think there is no office devolving upon the military surgeon more delicate in its nature than the decision of this very question. To detain from the service of his country, wasting his time in a hospital, a man whose ailments are imaginary, or at best put on for the occasion, is a grievous wrong—to send into the field as a malingerer one who is unfit for duty, and who is really a sufferer from disease even though his "pain be not accompanied with manifest derangement of the general health, wasting of a limb, or other positive sign of disqualifying local disease," is an act repugnant to all the better feelings of our nature. It may be that "Paragraph 85" is the best that could have been made under the circumstances, yet we should be very unwilling, as we suspect its author would be, to test it by its application to our own selves. There are many morbid conditions attended with much suffering which are not manifested by positive change of structure, and the most intense pain we have ever been cognizant of has occurred without manifest derangement of the general health. The decision of this subject, therefore, is, as we have intimated, one requiring the exercise of the greatest judgment, kindness and experience; one not to be entrusted to a young, careless and inexperienced surgeon, as we have too often known it to be.

With this, we close our imperfect notice of Dr. Woodward's interesting volume, a work which we are happy thus to commend to the attention of the profession.

Periscope.

Cork Charcoal in Dysentery.

A surgeon of the Austrian service, in the Banate, Dr. Poliezky, makes an interesting report of a somewhat novel treatment, though highly successful in an epidemic of this disease. After the usual remedies had been tried without reducing the proportion of fatal cases, he was led to employ the powdered charcoal of cork, which he understood to be largely used for this purpose on board of Greek vessels.

Patients with whom the number of calls did not exceed twenty per diem, received on the first day in the morning and evening half a tablespoonful, mixed with water; this dose was increased to a whole spoonful on the second, to one and a half on the third; and to two spoonfuls on the fourth day, and the latter dose continued for two or three days longer. Regimen: full diet with egg julep or water alone for drink.

When the number of passages exceeded thirty, he commenced with a tablespoonful three times a day, increasing by a half spoonful each day to the third, after which two spoonfuls morning and evening were continued for four to five days longer. Regimen: same as above.

In both cases the passages took place on the third and fourth day without pain, became fewer and of a more solid consistence, and the patients were discharged, in the milder forms, after the eighth or ninth—in more aggravated cases in twelve or thirteen days after the commencement, with this treatment, to which sixty-three were subjected between July 18 and October 13, 1862, none of which ended fatally.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, MAY 14, 1864.

THE AMERICAN MEDICAL ASSOCIATION.

Improvements in its Organization.

The approaching session of our National Medical Association, will, we are led to believe, be a large and important meeting. The short time given to these meetings makes it the more necessary that the organization of the Association should be as perfect as possible, that its business may be conducted with system and dispatch. As conducive to this end the Association a few years ago was divided into sections, such as surgical, practical medicine, chemical, etc., and papers on any subject were referred to its proper section to be read and discussed there, and afterward reported by the section to the Association with such recommendation as its merits deserved. This feature of the Association can hardly be said to have had a thorough trial yet. We have not had time to get accustomed to its working, but when we do, we will find it a very important auxiliary. The amount of business transacted, and transacted profitably, can be increased almost indefinitely. The reports and papers will also receive more careful attention from the members, and the discussions to which they may give rise in the several sections, or in the Association, when brought before that body in full session, will be profitable to that class of men who take a special interest in any given subject. There might be still other sections, such as sections on insanity, and other collateral branches of the science which has to do with all that relates to the physical well-being of man. And the existing Associations that represent any of these subjects, as the "Association of Medical Superintendents of American Hospitals for the Insane," etc., might be merged into that of the American Medical Association, and be represented in its sections.

Another modification of the organization of the Association is proposed, and will probably be acted on at the approaching meeting. We refer to the proposition now before that body to appoint a Permanent Secretary. We regard this as a step having a very important bearing on the well-being and usefulness of the Association. An officer of this kind, if he will devote himself earnestly to the interests of the Association, can do much toward perfecting its organization, facilitating the transaction of business at its public meetings, and increasing the circulation of its Transactions, and by so doing, largely increasing its income, and giving it the means to offer large prizes for papers on medical subjects, to publish its Transactions, and to meet other necessary expenditures. As medical men generally attend the meetings of the Association at their own charges and these are generally very heavy it is important that the meetings be as short as possible, and to this end the business of the sessions should be laid out and conducted in a systematic manner, so as to dispatch it with rapidity. This can be greatly facilitated if the Association has a Permanent Secretary. He will, in time, become familiar with the order of business, and with parliamentary rules, and thus materially aid the President, who is ofter entirely ignorant of the duties of the presiding officer of deliberative bodies, in the discharge of his perplexing duties.

Another modification of the organization of the Association has reference to the place of meeting. That is not now before it, however, though we hope it will receive attention hereafter. We think it would be to the advantage of the Association if most of its meetings were held at one central point, or, perhaps, better still, if all its annual meetings were thus held, while it held semi-annual sessions in different parts of the country.

A somewhat more restricted representation would also be an advantage by reducing the number of delegates, and thus avoiding much confusion and facilitating the transaction of business. It would also be more just to the general interests of the profession.

One thing more, though not strictly belonging to the organization of the Association. The burden of the expense of the delegates should not fall on them, but should be borne by the societies and public institutions that they represent. It is so with other bodies, why not with the American Medical Association?

Notes and Comments.

Care of the Soldier.

The following we take from the *American Medical Times*. Considering the source from whence it comes, it may be regarded as a valuable tribute to the care bestowed by Government on its sick and wounded heroes, and to the efficient management of the Medical Department of the army. The *Times* has hitherto, by its partiality for the Sanitary Commission and its Surgeon-General, been betrayed into doing great injustice to both the Government and the Medical Department of the army.

"But while we give our charities so freely to the great almoner of the people,* we should not lose sight of the fact that the soldier is still the child of the Government, and that its all-bountiful hand supplies him with all that is necessary to his calling. It feeds and clothes him while in health, and in sickness make the most ample provision for his comfort. No Government ever provided such a system of hospitals and endowed them with such a profusion of conveniences for the sick In addition to the usual hospital ration, every luxury may be obtained by a proper management of the hospital fund. The Medical Supply Table authorizes the issue, on proper requisition, to all hospitals, of barley, extract of beef, cinnamon, cocoa, extract of coffee, cornstarch, farina, gelatine, ginger, concentrated milk, nutmegs, pepper, porter, white sugar, black tea, and tapioca; together with whisky, brandy, port, and Tarragona wine. The law of Congress approved August 3, 1863, provides that there shall be allowed in hospitals, under such regulations as the Surgeon-General may prescribe, such quantities of fresh or preserved fruits, milk, or butter, or of eggs, as may be necessary for the proper diet of the sick. The Medical Department, under the able management of Acting Surgeon-General BARNES, was never better prepared for vigorous operations than to-day. Its work is all thoroughly systematized, its provisions are abundant, and its agents are schooled with long experience."

Kingsley's Artificial Palate.

We have, on a former occasion referred at length to this triumph of the dental art, the invention of Dr. NORMAN KINGSLEY, of New York. The Doctor exhibited a patient wearing one of his contrivances in this city, recently to a number of our most eminent physicians and surgeons, who were all much gratified with its ingenuity and success.

It will be remembered that this apparatus besides closing the fissure in the palate gives the wearer considerable power over the muscular structure of the parts, adding greatly to his comfort and happiness.

* The Sanitary Commission.

Correspondence.

FOREIGN.

LETTERS FROM Dr. W. N. COTE.

PARIS, *March 31st*, 1864.

Electricity in Paralysis.

In no class of diseases has the power of electricity been so frequently tried, as in cases of paralysis affecting the body either generally or locally. When the affection proceeds from other causes than congestion or cerebral disease, it is invariably much benefitted by this remedy. In using it proper care should be taken to apply it moderately, as more is to be expected from its repetition than from employing it with violence, and likewise to confine its application to parts which are somewhat remote from the head. as in those cases which depend upon a compression of the brain, it might do injury by acting on the vessels of this organ. Electricity may be applied both by sparks and shocks. Galvanism has also been employed, and some practitioners have gone so far as to declare its effects in paralysis to be superior to those of electricity.

Hystero-Epilepsy.

Dr. DUNANT, of Geneva, and formerly *interne* at the Hospice de la Salpétrière, has kindly sent me a copy of a thesis he defended before the Faculty of Medicine in this city, on the subject of Hystero-Epilepsy, a disease of which he had seen several cases in the asylum, and which presents characteristic symptoms of both hysteria and epilepsy. During the paroxysms the patient is affected with stupor and insensibility, while at the same time the trunk of the body is turned to and fro, the limbs are variously agitated; wild and irregular actions take place in the alternate fits of laughter, crying, and screaming; incoherent expressions are uttered, a temporary delirium prevails and a frothy saliva is discharged from the mouth. The fits are sometimes preceded by dejection of spirits, anxiety of mind, effusion of tears, difficulty of breathing, sickness at the stomach, and palpitations of the heart; but usually the patient falls down suddenly without much previous notice, the eyes are distorted or inverted, the fingers are closely clenched. At times the patient loses all sense of feeling; at others she falls into a hysteric fit of weeping and screaming. The epileptic and hysteric symptoms seem to alternate with some degree of regularity.

This disease usually attacks women of a delicate habit, and whose nervous system is extremely sensible. It is readily excited in those who are subject to spasmodic affections by the passions of the mind, and by every considerable emotion, especially when brought on by surprise, such as sudden joy, grief, fear, etc. This disease usually terminates fatally. However some cases have been entirely cured by the application of electric current according to FARA-

day's method, an operation now designated under the name of *faradization*. It is much employed at the Hospice de la Salpêtrière, and is, according to Dr. Dunant, the most efficacious remedy hitherto applied against this formidable malady. Dr. Dunant's thesis has been found worthy of a most honorable mention by the Medical Faculty.

Parathionate of Potassium.

M. A. Beauchamp Northcote has recently prepared a parathionate of potassium in the following curious manner. He had, about five years ago, made a solution of potash in pure absolute alcohol, and kept it in a well-stoppered bottle. While recently preparing the sulphorinic acid of a wax alcohol, he had occasion to employ this solution of potash for the neutralization of the sulphuric acid in which the wax alcohol had been dissolved; more alcohol was added, and then the potash. In the mass of sulphate of potassium which separated he found the sulphorinate he was seeking to prepare; but the clear alcoholic filtrate, in which nothing was suspected to exist, left, when its alcohol was distilled off, a small quantity of salt which, after two crystallizations from alcohol, yielded long prismatic crystals, colorless and transparent, but presenting a silky lustre when dried and matted together; they were perfectly soluble in alcohol and water, did not attract moisture, and could withstand a temperature of 185 deg. cent.

Formation of Urinary Calculi.

Dr. Mercier lately presented at the Academy of Medicine a most interesting work on a cause hitherto unnoticed, of the reformation of urinary calculi after the operations of lithotomy and lithotrity. This cause is to be found in the incrustation of the mucous membrane of the bladder by phosphatic salts in certain cases of chronic inflammation and especially of foreign bodies. These incrustations, by separating themselves, may become the nuclii of new stones. This circumstance, one author thinks, is the most frequent cause of formations which are usually attributed to the extraction being incomplete. Lithiasis has been thought to depend upon a peculiar disposition of the fluids, and now, particularly the secretion of the kidneys, to form a calculous matter, and has been supposed to be owing to the presence of an acid principle in them, termed the uric acid, called lithic acid by Schule. According to the latest and best writers, the urinary calculi are found to consist of the following material: lithic acid, lithate of ammonia, phosphate of magnesia and ammonia, phosphate of lime, oxalate of lime, triple phosphate of magnesia, ammonia and phosphate of lime, and carbonate of lime. Dr. Wollaston designates four species: 1. The fusible calculus, consisting of phosphoric acid, magnesia, and volatile alkali, and hence called by Fourcroy, the ammoniaco-magnesian phosphate. 2. The mulberry calculus, consisting chiefly of the oxalate of lime. 3. The bone-earth calculus, made of phosphate of lime or animal earth, and 4. The uric acid calculus. The nucleus of a calculus from the bladder is most usually formed of uric acid, more rarely it is agglutinated ammoniaco-magnesian phosphate. The most rare is the mulberry calculus consisting throughout of oxalate of lime. Those calculi that are formed of uric acid, are distinguished by their red or dark-yellow color, being somewhat smooth, but generally having a rough surface. Those composed of a combination of uric acid, with ammoniaco-magnesian phosphate are of a pale or grey color, having a smooth but not unfrequently crystalline surface. Those composed of oxalate of lime are known by the protuberances and irregularities of surface, (whence the name of mulberry calculi) superior compactness, weight, and dark color.

Various hypotheses have been emitted on the formation of urinary calculi. Thus it has been thought that a long use of fermented liquors and of wines abounding with tartar in some constitutions prove occasional causes of the gravel and stone. It has also been supposed that water impregnated with sulphate and carbonate of lime, constituting what is called hard water, predisposes persons to be afflicted with urinary calculi. This disease is known to be common in cold, moist, and variable climates, and in families peculiarly subject to disorder of the digestive functions. On the other hand cases of this malady have been found also in warm climates, and numerous operations are reported as having been performed on adults and children in Bengal and India. That a morbidly increased secretion of gravelly matter frequently occurs independent of external causes, we have the most satisfactory proof in the hereditary disposition of many families to this complaint. The real causes of the formation of calculi remain, however, still unknown. An excess of uric acid is generally supposed to be the proximate one. According to Dr. Mercier, the concretions which are formed originally in the kidneys, and thence find their way along the ureters to the bladder, are produced by the alkalinity of the urine most usually brought on by chronic nephritis. The phosphates normal urine contains are kept in chemical solution in this fluid by means of an acid, since they are hardly soluble in water. If then this acid disappear or becomes neutralized, the phosphates, acting like a precipitate, are deposed wherever any circumstance whatever favors their adhesion. The ulcerations of the mucous membrane due to the passage of an extraneous body and sometimes to the simple progress of inflammation, present favorable conditions for the deposition of phosphatic particles. Our author draws the inference that we may usually expect the reformation of urinary calculi after the extraction of a stone, especially if the urine be alkaline and the kidneys affected with chronic inflammation. Irrigations in the bladder, and injections with weak chlorhydric and nitric acids will, in such cases prove very beneficial.

Tracheotomy in Croup.

Five students at the Hôpital Beaujon have recently performed an act of heroism. After an operation of tracheotomy in a case of croup, they had recourse to

insufflation with a canula, in the vain attempt of restoring a patient threatened with asphyxia. It is to be hoped these noble young men will not fall victims to this act of devotion. The experiences made by Drs. Trousseau, Peter, Bouley and Reynal, have rendered very probable, if not altogether certain, the non-inoculability of diptheric matter. M. Husson, the Director of the Assistance Publique, on hearing of this affair, called personally upon the students and warmly thanked them for their act of self-devotion.

W. N. Côte.

DOMESTIC.

Spotted Fever.

Editor Med. and Surg. Reporter:—Having recently noticed in your journal, several accounts of a disease called spotted fever, or cerebro-spinal-meningitis, with a request to the profession to furnish any information which may throw light on its pathology, or indicate the proper mode of treatment, I transmit, in an imperfect manner, the result of my own experience in this disease, as it appeared in this State during the winters of 1847 and 1848.

Having made no notes of my cases at that time, and depending entirely upon memory, and so long a period having elapsed. I am obliged to omit many of the details and particular symptoms, which would make the report more satisfactory.

In those cases I attended, the patients were usually attacked very suddenly with severe pain in the head, along the spine, or in the extremities. Oftentimes, at first, the pain was confined to the thumb, heel, or toe; but usually, as the disease advanced, if not in its advent, excruciating pains were felt in the head and in the course of the spine, accompanied, frequently, with furious delirium; the eyes were injected, pulse small, feeble, rapid, and easily compressible; all these symptoms often showing themselves within a few hours from the commencement of the attack.

Had I been able to obtain my information in these cases from sight only. I should have supposed the disease to be of a sthenic character, requiring depleting treatment; but the condition of the pulse forbade this supposition. In addition to the symptoms above mentioned, I found, in my first case, and in several subsequent ones, small spots on the skin, as if bruised and discolored by extravasated blood. At other times the eruption, if I may so call it, was quite small; but I did not find the eruption an invariable accompaniment.

Being governed in my treatment by the indications offered by the pulse, I adopted at once the stimulating and revulsive plan, judging it to be a disease of debility, rather than of a sthenic character. Brandy and quinine were freely administered; of the latter, often from one to two drachms, in divided doses, were given within the first twenty-four hours; and, indeed, with this treatment alone, I have seen some of the more severe cases relieved of their worst features in a few hours, the delirium subsiding, and the pulse becoming full and less frequent.

When the pain in the head was intense, I usually applied sinapisms to the back of the neck; or, in more urgent cases, Aquia ammonia fff, and frequently these applications were made the entire length of the spine and to the extremities.

For the purpose of obtaining its revulsive effect, and relieving the congestion of the nervous centres, and equalizing the circulation, I almost invariably, when first called, gave my patients the benefit of a vapor bath. This I extemporized by placing the patient in a chair, over a basin of water, and enveloping the chair and entire person, with the exception of the head, in woolen blankets, and placing hot stones or irons in the water. This soon excites a very free diaphoresis. I usually keep them in the vapor bath fifteen or twenty minutes, then wrapping them in the same blankets, placing in bed and covering well to keep up the perspiration, while the stimulants above mentioned were freely given.

Under this treatment, every case that came into my hands during the early stages of the disease (and they were many), rapidly recovered. But where the depleting and antiphlogistic plan was pursued, as it was by many, before they fully learned the nature of the difficulty, it was almost invariably fatal in its results.

During this epidemic, two cases were left in my charge by another physician, who was compelled to be absent. Each one, at the time I was called, had been lingering for several weeks, and both died within a few weeks thereafter; one an adult, and the other a child about two years of age. In each case, two or three days before death, tonic spasms of the muscles of the back existed to such an extent that the body was bent like a hoop, the heels and occiput only touching the bed when in a recumbent posture.

I made a post-mortem examination of the child, and found the lateral ventricles filled with serum, and an effusion of creamy, curd-like substance beneath the medulla oblongata.

I regard the disease as one belonging to that great class dependent mainly upon atmospheric causes, in which the vital powers are greatly depressed, and in which the tonic and stimulating plan of treatment is clearly indicated.

Very respectfully,

Geo. A. Lathrop, M. D.

East Saginaw, Mich., April, 1864.

"Spotted Fever."

Editor Med. and Surg. Reporter:—

Dr. Edward Lynch, of Lancaster, Ohio, writes as follows in regard to the treatment of spotted fever: "About twenty-seven years ago this disease was very prevalent in Ireland, and proved very fatal. The treatment was very unsuccessful until Surgeon Crampton, the Surgeon-General of Ireland, published a small work on Eruptive Fevers, treating particularly of Spotted Fever. He strongly advised physicians not to resort to blood-letting, purgative

medicines, or mercurials, saying that if they did, death would be the inevitable result. The following was his plan of treatment, which I have frequently followed, both in Europe and in this country, having treated nine cases successfully within the past ten weeks.

℞.	Liq. ammonia acetat.,	f℥iij.
	Sp. ath. dit.,	f℥iij.
	Tinct. hyosciam,	
	Sp. ath. sulph. co.,	āā f℥ij.
	Tinct. digitalis,	f℥j.
	Coccus cacti,	℥j.
	Syrup croci,	f℥j. M.

A teaspoonful to be taken three times during the day, and three times during the night, in a tablespoonful of saffron tea. Should the bowels become costive, use injections of chicken broth or gruel with a tablespoonful of butter. If the feet are cold, bathe them with a liniment made of one ounce of ground mustard in three ounces of alcohol."

"The Social Evil—License or no License."

Editor Med. and Surg. Reporter:—

The bold disregard of the Seventh Commandment, as well as the dreadfully desolating consequences flowing from public, if not legalized harlotry of the present day, is sufficient to perplex the moralist and statesman in every part of the enlightened world.

I believe the time was when this body and soul-destroying habit of those whose "feet go down to death" and whose "steps take hold on hell" was chiefly confined to cities and large towns—but now the facilities for travel have brought all classes and parts of our country more together, and consequently this human scourge has spread in proportion.

This horrible and blood-poisoning vice is so generally understood by the medical profession at the present day, that it is useless to enlarge on this abyss of human depravity; and it is needless to recount the various regulations, persuasive, charitable, and the so-called legal restraints, on this worst of all evils—for they have all failed, and in many instances become "*particeps criminis* and promoters" of the very evil they sought to check.

This social evil will never be arrested until a radical reform in our laws* is established and executed. And in doing this, a proper discrimination should be made between persons infected in a lawful manner, or otherwise. For example, a virtuous woman might be contaminated by a libidinous husband; and *vice versa*, a child may have a hereditary taint. Such cases are not proper subjects for punishment; but all persons plying the trade of decoying the opposite sex into horrible dens of disease and criminality, setting their feet on the path that "goes down to death," are fit subjects for punishment.

1st. Females guilty of illicit habits should be sent to venereal asylums for life, there so treated and employed as to improve their moral and physical condition. Such institutions might be made self-supporting, or nearly so.

2d. The procuress and keepers of brothels should suffer death.

3d. All males frequenting brothels should be castrated.

These measures stringently enforced would certainly do more to arrest the so-called social evil than any other I can conceive of.

William Anderson.

Indiana, Pa., May 9th, 1864.

* "And law-makers," our correspondent might have added. —Ed. Med. and Surg. Rep.

News and Miscellany.

Missing Books of Galen's Principal Anatomical Works.

With pleasure we learn from the April number of the *Brit. and For. Med. Chir. Rev.*, that there is about to be issued from th Oxford University Press—"The Arabic translations of the principal anatomical works of Galen, great part of which does not now exist in the original Greek, and has never been published in any form."

It is well known that Galen's principal work—the "Administrationibus Anatomics,"—originally consisted of fifteen books, of which the first eight and a portion of the ninth only are now extant, consequently the six about to be presented to us will contain an account of the eyes, tongues, œsophagus, larynx, os hyoides, the nerves belonging to these parts; the arteries, veins and nerves arising from the brain, those from the spinal marrow and the organs of generation; so that Galen's account of several of the most important parts of the body is contained in these lost books.

The original MS. is written by an oriental scribe on oriental paper, and although it was once in the library of Narcissus Marsh, Archbishop of Dublin, and published in his catalogue of oriental MSS., appears to have escaped the attention of the learned, until attention was called to the fact by the editor of the *Medical Times and Gazette* some twenty years ago, that it was in the Bodleian library. Its translation was undertaken by Drs. Adams and Greenhill, but the decease of the former interrupted the labor until the present time, when we are gratified to learn that it has been resumed by Dr. Greenhill, and will be presented to the profession at an early day.

Its discovery, after a lapse of eighteen centuries, should certainly encourage us in the hope that some of the writings of the early fathers in medicine now regarded as lost may be brought to light by searching the catalogues of oriental literature which has accumulated upon the shelves of the public libraries of Europe.

Army and Navy News.

Correspondence on Official Matters.

Circular Letter.

SURGEON-GENERAL'S OFFICE, WASHINGTON, D. C., *April* 27, 1864.

Copy.

WAR DEPARTMENT, ADJUTANT GENERAL'S OFFICE, WASHINGTON, *March* 30, 1864.

General Orders, No. 129.

The attention of all officers is called to the Army Regulations and General Orders in regard to correspondence on official matters. All such correspondence must be conducted through the proper official channels, except in cases of pressing necessity, which do not leave time for regular communication, and then the necessity must be stated All applications or correspondence, through whomsoever made, in violation of this order, will not be responded to, and the writers will be arrested and tried for disobedience of orders, or recommended to the President for dismissal.

By command of Lieutenant General Grant.

E. D. TOWNSEND, Ass't Adj't-Gen'l.

The attention of all Medical Officers of the Army is called to the above order from the War Department, and a strict compliance with the same is enjoined.

By order of the Acting Surgeon-General.

C. H. CRANE, Surgeon, U. S. Army.

Appointments.

Acting Ass't Surgeon Samuel B. Ward, U. S. A., Surgeon J. Sykes Ely, 126th Ohio Vols., Acting Ass't Surgeon Herman Loewenthal, U. S. A., and Dr. N. M. Glatfelter, Acting Medical Cadet, U. S. A., to be Ass't Surgeons of Volunteers.

Dr. D. D. Taulman, of New York, to be Ass't Surgeon, 26th U. S. Colored Troops.

Discharges, Dismissals, &c.

Surgeon O. Munson, 108th New York Vols., honorably discharged for physical disability, on the report of a military commission.

Ass't Surgeon Harlow Gornwell, 2d Massachusetts Cavalry, honorably discharged at the request of the Governor of Massachusetts, to accept an appointment in the 5th Massachusetts Cavalry.

Ass't Surgeon E. P. Hoover, 95th Ohio Vols., honorably discharged on Surgeon's certificate of physical disability.

Surgeon T. E. Mitchell, 1st Maryland Volunteers, having tendered his resignation is honorably discharged.

Ass't Surgeon William B. Brinton, 4th Pa. Reserves, honorably discharged at the request of the Governor of Pennsylvania, to accept an appointment in another regiment.

Medical Cadet J. E. Painter, U. S. A , honorably discharged.

Ass't Surgeon Finley C. Lattemore, 6th Indiana Volunteers, for physical disability and absence without leave, on the recommendation of a military Board.

Leave of Absence.

Ass't Surgeon Octave P. F. Ravenots, 75th Illinois Vols., paroled prisoner of war, for twenty days, at the expiration of which he will report at Camp Chase, Ohio.

Ass't Surgeon Charles A. Devendorf, 48th New York Vols., paroled prisoner of war, for twenty days, at the expiration of which he will report at Camp Parole, Annapolis, Md.

Surgeon C. F. H. Campbell, U. S. V., for ten days.

Surgeon D. B. Sturgeon, U. S. V., for sixty days, with permission to apply for an extension of twenty days.

Orders.

Ass't Surgeon Samuel B. Ward, U. S. V., will report to Surgeon R. O. Abbott, U. S. A., Medical Director, Department of Washington, for duty.

Ass't Surgeons J. Sykes Ely and Herman Loewenthal, U. S. V., will report to the Commanding General, Army of the Potomac, for duty

Ass't Surgeon N. M. Glatfelter, U. S. V., will report to the Commanding General, 9th Army Corps.

Ass't Surgeon G. L. Porter, U. S. A., is relieved from duty in the Army of the Potomac, and will relieve Ass't Surgeon J. Gibson, U. S. A., at the Washington Arsenal.

Ass't Surgeon Gibson on being relieved will report to the Commanding General, Army of the Potomac.

Surgeon George Suckley, U. S. V., is relieved from duty in the Middle Department, and will report to the Commanding General, Department of Virginia and North Carolina, for duty as Medical Director or on the staff of Major General W. F. Smith, U. S. Vols.

Surgeon G. M. Ramsey, 95th New York Vols., will report in person to the Secretary of the Navy to superintend the trial of the Torpedo Boat, his invention.

Surgeon H. A. Martin, U. S. V., is relieved from duty in the Department of Virginia and North Carolina, and will report to the Commanding General, Army of the Potomac.

Ass't Surgeon W. O. McDonald, U. S. V., is relieved from duty in the Army of the Cumberland, and will report to the Commanding General, 9th Army Corps.

Surgeon Henry Janes, U. S. V., is relieved from duty in the Department of the Susquehanna, and will report to the Surgeon-General, U. S. A.

Surgeon S. J. W. Mintzer, U. S. A., is relieved from duty in the Army of the Cumberland, and will report to the Commanding General, Department of the Susquehanna.

Surgeon George E. Cooper, U. S. A., is relieved from duty in the Ass't Surgeon-General's Office, and will report to the Commanding General, Army of the Cumberland to relieve Surgeon Glover Perin, U. S. A., as Medical Director of that Army.

Surgeon Perin on being relieved, will report to Ass't Surgeon-General Wood, at Louisville, Ky., for assignment to duty.

Ass't Surgeon Samuel Adams, U. S. A., will report to the Commanding General, Army of the Potomac, having been relieved from duty with Surgeon-General Hammond.

Lieut.-Colonel E. P. Vollum, Medical Inspector, U. S. Army, will proceed forthwith up the Red River, and make an inspection of the condition of the wounded in the recent engagements in that section, and the means taken to provide for them.

Lieut.-Colonel R. H. Coolidge, Medical Inspector, U. S. Army, is relieved from duty in the Department of Washington, and will report in person to Ass't Surgeon-General R. C. Wood, U. S. A., for assignment to duty.

Lieut-Colonel George W. Stipp, Medical Inspector, U. S. A., is relieved from duty in the Department of the Gulf, and will report in person to Ass't Surgeon-General R. C. Wood, U. S. A., for assignment to duty in the Department of the Northwest.

Assignments.

Hospital Steward William H. Martin, U. S. A., to the 10th Regiment, U. S. Colored Troops.

Surgeon Henry Janes, U. S. V., to the U. S. Hospital Transport "State of Maine."

Ass't Surgeon Thomas B. Hood, U. S. V., to the U. S. Hospital Transport "Connecticut."

Surgeon J. H. Rauch, U. S. V., as member of the Examining Board for Veteran Reserve Corps, at Detroit, Mich.

Surgeon D. G. Brinton, U. S. V., as Surgeon in charge General Hospital, Quincy, Illinois.

Hospital Steward J. Hennessy, U. S. A., to Washington, D. C.

Surgeon P. A. O'Connell, U. S. V., as Surgeon in Chief, 3d Division, 9th Corps, and as Medical Inspector, same Corps.

Ass't Surgeon W. A. Banks, U. S. V., as Surgeon in charge General Hospital, Parkersburg, Va.

Surgeon T. B. Reed, U. S. V., to the Head Quarters, Department of West Virginia.

Surgeon Andrew Voorhies, 11th West Virginia Vols., to the General Hospital, Parkersburg, Va.

Acting Ass't Surgeon W. B. Crain, U. S. V., to the Post Hospital, New Creek, Va.

Ass't Surgeon A. W. Sigmund, U. S. V., to Camp Douglas, Chicago, Illinois.

Surgeon Thomas H. Bache, U. S. V., to Camp William Penn, Chelton Hills, Philadelphia, Pa.

Surgeon J. S. Kemble, U. S. V., as Medical Director, Defences of Vicksburg and Natchez, Miss.

Surgeon J. W. Lawton, U. S. V., as Surgeon in Chief, 2d Division, 23d Corps, Army of the Ohio.

Surgeon A. C. Van Duyn, U. S. V., as Medical Director, District of Southern Kansas, Fort Scott, Kansas.

Hospital Steward Wm. F. Smith, U. S. A., to the 9th Regiment, U. S. Colored Troops.

Ass't Surgeon Alfred Delaney, U. S. V., to the Campbell Hospital, Washington, D. C.

Surgeon Frank Meacham, U. S. V., to the 3d Division, 23d Corps, Army of the Ohio.

Acting Ass't Surgeon Robert Peter, U. S. A., as Surgeon in charge, General Hospital, Lexington, Ky.

Surgeon J. B. Morrison, U. S. V., as Surgeon in Chief, Vodges' Division, 10th Army Corps.

Surgeon J. G. Hatchitt, U. S. V., as Surgeon in Chief, 1st Division, District of Kentucky.

Surgeon W. S. Thompson, U. S. V., as Surgeon in Chief, Artillery Brigade, 5th Corps, Army of the Potomac.

Surgeon R. L. Stanford, U. S. V., as Surgeon in charge General Hospital No. 1, Nashville, Tenn.

Ass't Surgeon A. P. Williams, U. S. V., as Post Surgeon, Depot of Veteran Reserve Corps, Washington, D. C.

Ass't Surgeon J. C. Carter, U. S. V., as Medical Purveyor, Department of West Virginia.

Surgeon N. S. Barnes, U. S. V., as Surgeon in Chief, General Hinks' Division, 18th Army Corps.

Ass't Surgeon S. J. Radcliffe, U. S. V., to the 2d Brigade, Artillery Reserve, Army of the Potomac.

Ass't Surgeon L. D. Sheets, U. S. V., to the 3d Brigade, Artillery Reserve, Army of the Potomac.

Miscellaneous.

So much of Special Orders, No. 132, current series from the War Department, as dismissed Surgeon H. Tamage, 34th Kentucky Volunteers, for absence without leave, is revoked, he having been acquitted of that charge by a military commission.

Surgeon Adolf Majer, U. S. V., is in close arrest at Hilton Head, S. C., for disobedience of Orders.

Surgeons P. A. O'Connell and J. G. Hatchitt, U. S. V., have returned from leave of absence, and reported for duty at their former stations.

Immediately after the late battle on Red River, Ass't Surgeon-General Wood, dispatched the U. S. Hospital Transports "R. C. Wood" and "C. McDougall," to the scene of action, loaded with plentiful supplies of medicines, stores and comforts for the wounded.

ANSWERS TO CORRESPONDENTS.

☞ Correspondents will please bear in mind that it is just now exceedingly difficult to get some kinds of work done, and much delay is sometimes caused thereby in filling orders. *Everything is at maximum prices.* Many books are out of print, and publishers are not issuing many new works or editions. Foreign books had better not be ordered.

Dr. D. W. J., Tenn.—A copy of Barclay's Medical Diagnosis was mailed to your address, 2d inst.

Dr. W. H. R, Ohio.—Your Tenotomy Knife was sent by mail, May 5, 1864.

Dr. T. W. J., Mo.—Bernard & Huett's Operative Surgery was sent by mail, 5th inst.

MARRIED.

Buffett—Smith.—On Tuesday, April 26th, by the Rev. Matson M. Smith, of Bridgeport, Ct., Edward P. Buffett, M. D., of Bergen, N. J., and Catharine L., daughter of Walter M. Smith, of New York.

Callender—Frye.—On Thursday, the 5th inst., at the residence of the bride's father, by Rev. Mr. McLaren, Elliott Callender, U. S. N., and Mary E., daughter of Dr. Joseph C. Frye, all of Peoria, Ill.

McCalla—Hill.—At Trinity Chapel, N. Y., on Thursday, April 14th, Dr. J. M. McCalla, A. A. Surgeon, U. S. A., and Helen Varnum, daughter of the late S. H. Hill, of Washington, D. C., and niece of Joseph B. Varnum, Jr., of New York.

Smith—Marsden.—In New York, April 26th, by the Rev. Morgan Dix, D. D., Oscar G. Smith, M. D., and Isabella, eldest daughter of the Rev. Thomas Marsden.

DIED.

Chadbourne.—Dr. Thomas Chadbourne, the oldest physician in Concord, N. H., died April 29, aged seventy-four years. He was a graduate of the Medical Department of Dartmouth College.

Dodge.—In New York, on Saturday, May 7th, Caroline H., wife of Dr. D. S. Dodge, aged 59 years

Gray.—In the Borough of Chester, on the afternoon of the 8th instant, Dr. William Gray, in the 69th year of his age.

Hartt.—In New York, on Friday morning, April 15, James Main Hartt, son of Dr. Henry A. Hartt, aged 20 years and 7 months.

Morris.—At Saratoga Springs, N. Y., on Friday, May 6th, Anna Maria J., wife of Lieut.-Colonel Gouveneur Morris, U. S. Army, and daughter of Dr. S. G. J. De Camp, U. S. Army.

Taylor.—In this city, on the evening of the 11th instant, Mary C., widow of the late Charles H. Taylor, M. D., in the 31st year of her age.

ORITUARY.

Abraham Gesner, M. D.

This celebrated chemist and geologist died at Halifax, Nova Scotia, on the 29th of April last, in the 67th year of his age. Though more generally known here as a chemist, Dr. Gesner was one of the most experienced geologists in America. He surveyed New Brunswick and Prince Edward's Island, under the instructions of their several Governments, and from his extensive knowledge of the Lower Provinces generally, was enabled to write of them in a clear and instructive style. His chief works are "Remarks on the Geology and Mineralogy of Nova Scotia, New Brunswick, with Notes for Emigrants;" "Industrial Resources of Nova Scotia;" "A Practical Treatise on Coal, Petroleum, and other Distilled Oils," and a work on "The Fisheries of the Provinces," which he had just completed, and will be published by the Government of Nova Scotia. Dr. Gesner's principal and most successful effort in practical chemistry, was the discovery and introduction of kerosene oil, and oils distilled from coal, bitumen, etc., into this country. He was a man of untiring energy and perseverance, and deserves the high reputation which he enjoyed, both here and in Europe, as a man of science.

METEOROLOGY.

May	2,	3,	4,	5,	6,	7,	8.
Wind	S. W.	W.	S. W.	S. W.	N. W.	W.	S. W.
Weather	Clear, Th'dr, Li'ng, Sh'er.	Clear.	Clear.	Clear.	Clear.	Clear.	Clear.
Depth Rain	5-10						
Thermometer							
Minimum	40°	35°	37°	42°	46°	54°	53°
At 8 A. M.	56	51	53	62	63	70	65
At 12 M.	65	50	61	70	73	81	79
At 3 P. M.	59	54	61	71	79	81	82
Mean	55.0	47.2	53.0	61.1	65.1	71.2	69 3
Barometer.							
At 12 M.	29.8	29.8	30.1	30.3	30 2	30.0	29.9

Germantown, Pa. B. J. Leedom.

MORTALITY.

	Philadelphia. Week ending May 7.	New York. Week ending May 9.	Baltimore. Week ending May 9.	Boston. Week ending May 9.	Providence. Month of March.
Popl'n, (estimated.)	620,000	1,000,000	240,000	180,000	52,000
Mortality.					
Male	167	268	72	49	44
Female	159	241	47	48	54
Adults	155	235	43	50	59
Under 15 years	173	264	70	43	35
Under 2 years	100	148	40	32*	12
Total	329	509	113	97	95
Deaths in 100,000	53.06	50.90	47.08	53.88	182.69
American	252	327	...	63	78
Foreign	77	182	...	34	17
Negro	19	8	19	3	10
Zymotic Diseases.					
Cholera, Asiatic	...	...	...	...	...
Cholera Infantum	1	2	...	...	...
Cholera Morbus	...	1	...	...	...
Croup	7	18	12	1	3
Diarrhœa	3	7	...	1	...
Diphtheria	4	23	2	1	7
Dysentery	1	4	1	...	...
Erysipelas	2	5	2	...	...
Fever, Intermittent	...	...	...	...	...
Fever, Remittent	1	1	...	...	...
Fever, Scarlet	2	23	1	4	8
Fever, Typhoid	12	9	7	2	5
Fever, Typhus	4	26	...	...	1
Fever, Yellow	...	...	...	...	...
Hooping-cough	1	...	3	...	...
Influenza	...	...	...	...	...
Measles	5	...	5	1	...
Small Pox	6	3	10	3	...
Syphilis	1	...	...	...	...
Thrush	...	...	...	...	...
Sporadic Diseases					
Albuminuria	...	7	...	...	...
Apoplexy	5	9	...	2	...
Consumption	52	74	21	19	22
Convulsions	19	32	2	5	2
Dropsy	4	26	2	1	...
Gun-shot Wounds	...	...	...	...	...
Intemperance	...	3	1	1	2
Marasmus	6	22	...	...	...
Pleurisy	2	6	...	...	...
Pneumonia	27	36	4	10	9
Puerperal Fever	...	3	...	...	...
Scrofula	...	1	1	...	...
Violence and Acc'ts	13	25	3	...	5

* Under 5 years.

NOTICE.

American Medical Association.

The Fifteenth Annual Meeting of the "American Medical Association," will be held in the City of New York, commencing Tuesday, June 7th, 1864, at 10 o'clock, A. M

Proprietors of medical journals throughout the United States and their Territories are respectfully requested to insert the above notice in their issue.

Guido Furman, M. D.,
126 West 25th St., N. Y. Secretary.